DM-10/03

Attorney Docket No: CXU-342-CIP

Art Unit: 2881

Our Customer ID: 22827

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **INFORMATION DISCLOSURE STATEMENT**

⊀ΣenAution of: R. KENNETH MARCUS W. CLAY DAVIS

Filing Date: August 7, 2003

Confirmation No: 2101

Serial No: 10/636,177

Our Account No: 04-1403

ATMOSPHERIC PRESSURE GLOW DISCHARGE OPTICAL EMISSION SOURCE FOR THE DIRECT SAMPLING OF LIQUID MEDIA

Commissioner for Patents U.S. Patent and Trademark Office Post Office Box 1450 Alexandria, VA 22313-1450

Sir:

The following is an Information Disclosure Statement for the captioned patent application, pursuant to 37 CFR Sections 1.56, 1.97, and 1.98.

- Attached hereto is: 1.[X]
  - a.[] A list of materials for consideration per Rule 98(a)(1): 2 page(s)
  - A legible copy of each patent, publication, or other item listed per Rule 98(1)(2), unless not b.[] required per Rule 98(c) and/or (d) and as indicated on the attached list(s): 9 item(s)
  - c.[] For each non-English language item listed, pursuant to Rule 98(a)(3), a concise explanation of the relevance thereof as it is presently understood by the individual designated in Rule 56(c) most knowledgeable about the content of such items: [] Such explanation is provided in the Search Report from a corresponding application enclosed herewith along with any enclosed translation into English.
- 2.[X] This Information Disclosure Statement is being filed [CHECK ONE]:
  - a.[X] WITHIN THREE MONTHS of the application filing date, national stage date of entry, or along with or after a request for continued examination, OR BEFORE the mailing date of a first Office Action on the merits, which ever event occurs last, WHEREFORE per Rule 97(b) NO filing fee or Rule 97(e) certificate is required.
  - AFTER the time periods of section 2.a above, but BEFORE a Final Action, Notice of Allowance b.[] OR an action that otherwise closes prosecution, WHEREFORE PER Rule 97(c) submitted herewith is [CHECK ONE]:
    - i.[] Certification per Rule 97(e); OR
    - ii[ ] Filing Fee per Rule 17(p) \$180.00

|                                                             | C.[ ]                                    | WHER                                                 | k a Final Action <u>OR</u> Notice (<br><u>EFORE</u> per Rule 97(d) sub                                                     | of Allowar<br>omitted he                                                 | nce, but BEFORE payment of the issue fee, erewith is:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            |
|-------------------------------------------------------------|------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
|                                                             |                                          | i.                                                   | Certification per Rule 97(e                                                                                                | ); <u>AND</u>                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |
|                                                             |                                          | ii.                                                  | Filing fee per Rule 17(p)                                                                                                  |                                                                          | \$180.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |
| 3.[]                                                        |                                          |                                                      | rtification; per Rule 97(e), tl<br>ECK ONE]:                                                                               | he unders                                                                | signed certifying party make the following certific                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ation      |
|                                                             | a.[]                                     | in a coi                                             |                                                                                                                            | n patent of                                                              | this Information Disclosure Statement was first of<br>ffice in a counterpart foreign application not more<br>statement; <u>OR</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |
|                                                             | b.[]                                     | foreign<br>unders                                    | patent office in a counterp                                                                                                | art foreigr<br>nable inq                                                 | s Information Disclosure Statement was cited in<br>n application and to the knowledge of the<br>uiry, was known to any individual designated in l<br>ling of this statement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |
|                                                             |                                          | certifica                                            | ation is being made by sign                                                                                                | er per sig                                                               | ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |
|                                                             |                                          | Addres                                               | es:                                                                                                                        | <u> </u>                                                                 | Signature:<br>Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |
| 4.[x]                                                       | specific which require resulting heading | ically aut<br>should hed under<br>ng officiang hereo | thorized hereafter, or any fon<br>nave been filed herewith or<br>r Rules 16-18 (deficiency on<br>al document under Rule 20 | ees in add<br>concernir<br>nly) now o<br>, or credit<br><u>cate</u> copy | mmissioner is hereby authorized to charge any faction to the fee(s) filed, or asserted to be filed, on any paper filed hereafter, and which may be not hereafter relative to this application and the any overpayment, to our Account No. shown in the fact of this sheet is attached. This statement does represent the statement of the statement does represent the statement does not do the statement do the statement does not do the statement does not do the statement does not do the statement do the statement does not do the statement do the | r<br>the   |
| 5.[x]                                                       | "Expre                                   | ess Mail"                                            | Certificate under Rule 10:                                                                                                 |                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |
|                                                             | "Expre                                   | ess Mail"<br>of Depos                                | -Label No. EV342<br>it November (                                                                                          | .6903<br>2,200                                                           | 300 US                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |
|                                                             | I herel<br>Servic<br>above               | oy certify<br>e "Expre<br>and is a                   | that this paper and all atta                                                                                               | chments<br>ressee" se                                                    | and any fee are being deposited with the U.S. Pervice under 37 CFR 1.10 on the date indicated Patent, U.S. Patent and Trademark Office, Post C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |
|                                                             | 7                                        | d/printed                                            | R. Ginn I name of person mailing pa  R. Lucu  Derson mailing paper or fee                                                  |                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |
| ADDR                                                        | ESS:                                     |                                                      |                                                                                                                            |                                                                          | DORITY & MANNING, P.A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |
|                                                             |                                          | ox 1449                                              |                                                                                                                            |                                                                          | By: James M. Bagarazzi Reg No.: 29,609                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 9          |
| Greenville, South Carolina 29602<br>Telephone: 864-271-1592 |                                          |                                                      |                                                                                                                            |                                                                          | Signature: James M. Bayara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>b</b> ) |
| Facsin                                                      | nile: 8                                  | 64-233-7                                             | 7342                                                                                                                       |                                                                          | Date: 11 7003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |
|                                                             |                                          |                                                      |                                                                                                                            | Page 2                                                                   | of 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |

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Rev. 5/92) **Attorney Docket Number** Serial Number Information Disclosure Statement List CXU-342-CIP 10/636,177 By Applicant **Applicant** Under 37 CFR Section 1.98(a) (1) R. KENNETH MARCUS W. CLAY DAVIS (Use several sheets if necessary) Filing Date: August 7, 2003 Group Confirmation No.: 2101 2881

NOTE: If no indication is made in the column marked "COPY NOTE," the required legible copy of the corresponding item is submitted herewith; otherwise, a copy is not required and/or not submitted, for the following reason(s) [corresponding reason number is listed in "COPY NOTE" column]"

- (1) This item is cumulative, per Rule 98(c)
- (2) A copy of this item was previously cited by or submitted to the U.S. Patent and Trademark Office in: USSN \_\_\_\_\_\_, filed \_\_\_\_\_, or USSN \_\_\_\_\_\_, filed \_\_\_\_\_, Relied on under 35 U.S.C. Section 120, per Rule 98(d)
- (3) Both reasons (1) and (2) apply
- (4) No legible complete copy is possessed, in custody of controlled, or readily available
- (5) Per the U.S. Patent and Trademark Office's waiver of Rule 98(a)(2)(i), the item is a U.S. patent or patent application publication, and the present application was filed after June 30, 2003.

| U.S. PATENT DOCUMENTS |  |               |               |               |              |
|-----------------------|--|---------------|---------------|---------------|--------------|
| EXAMINER INITIALS     |  | PATENTEE NAME | PATENT NUMBER | ISSUE<br>DATE | COPY<br>NOTE |
|                       |  |               |               |               |              |
|                       |  |               |               |               |              |
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| FOREIGN PATENT DOCUMENTS |         |                    |                     |             |    |              |  |
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| EXAMINER<br>INITIALS     | COUNTRY | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | TRANSLATION |    | COPY<br>NOTE |  |
|                          |         |                    |                     | YES         | NO | N/A          |  |
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<sup>\*&</sup>quot;NO" means that no copy of an English language translation is within the possession, custody, or control of, or is readily available to any individual designated in Rule 56(c).

| EXAMINER | OTHER DOCUMENTS                                                                                                                                                                                                                                                                             | COPY |  |  |  |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|--|--|
| INITIALS | Specify author (if any), Title, Pertinent Pages, Date & Place of Publication                                                                                                                                                                                                                |      |  |  |  |
|          | GLOW DISCHARGE SPECTRA OF COPPER AND INDIUM                                                                                                                                                                                                                                                 |      |  |  |  |
|          | ABOVE AQUEOUS SOLUTIONS, Dwight E. Couch and Abner                                                                                                                                                                                                                                          |      |  |  |  |
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|          | ATMOSPHERIC PRESSURE AIR USING WATER AS A                                                                                                                                                                                                                                                   |      |  |  |  |
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|          | ELECTROLYTE-CATHODE DISCHARGE SPECTROMETRY,                                                                                                                                                                                                                                                 |      |  |  |  |
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|          | RAPID COMMUNICATION THE GAS TEMPERATURE IN THE                                                                                                                                                                                                                                              |      |  |  |  |
|          | CATHODE SURFACE DARK SPACE BOUNDARY LAYER OF                                                                                                                                                                                                                                                |      |  |  |  |
|          | AN ELECTROLYTE CATHODE ATMOSPHERIC GLOW                                                                                                                                                                                                                                                     |      |  |  |  |
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|          | FUNDAMENTAL STUDIES OF ELECTROLYTE-AS-CATHODE                                                                                                                                                                                                                                               |      |  |  |  |
|          | GLOW DISCHARGE-ATOMIC EMISSION SPECTROMETRY FOR                                                                                                                                                                                                                                             |      |  |  |  |
|          |                                                                                                                                                                                                                                                                                             |      |  |  |  |
|          | WATER, Yang S. Park, Soo H. Ku, Sung H. Hong, Hyo J. Kim and                                                                                                                                                                                                                                |      |  |  |  |
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|          | DEVELOPMENT OF OPEN-AIR TYPE ELECTROLYTE-AS-                                                                                                                                                                                                                                                |      |  |  |  |
|          | CATHODE GLOW DISCHARGE-ATOMIC EMISSION                                                                                                                                                                                                                                                      |      |  |  |  |
|          | SPECTROMETRY FOR DETERMINATION OF TRACE METALS                                                                                                                                                                                                                                              |      |  |  |  |
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|          |                                                                                                                                                                                                                                                                                             |      |  |  |  |
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|          |                                                                                                                                                                                                                                                                                             |      |  |  |  |
|          | DOWNSIZING CHEMISTRY Chemical analysis and synthesis on                                                                                                                                                                                                                                     |      |  |  |  |
|          | microchips promise a variety of potential benefits, Michael                                                                                                                                                                                                                                 |      |  |  |  |
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| EXAMINER | DATE CONSIDERED                                                                                                                                                                                                                                                                             |      |  |  |  |
| 1        |                                                                                                                                                                                                                                                                                             |      |  |  |  |

Examiner: initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.